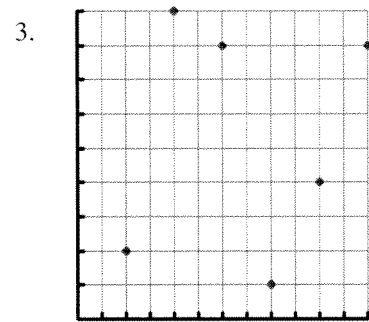
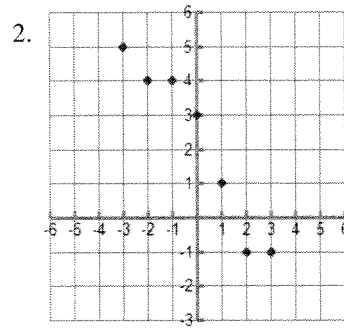
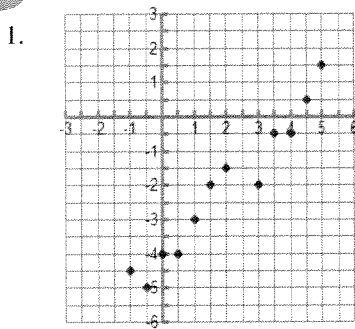


HW: Linear Regression

ate whether x and y have a positive correlation, a negative correlation, or no correlation.



Find the line of regression.

4.

x	y
1	2
2	5
3	5
4	8
5	11
6	12

5.

x	y
0	0.8
1.1	2.2
1.9	2.9
2.5	3.6
3.1	4.0
4.3	5.3

6.

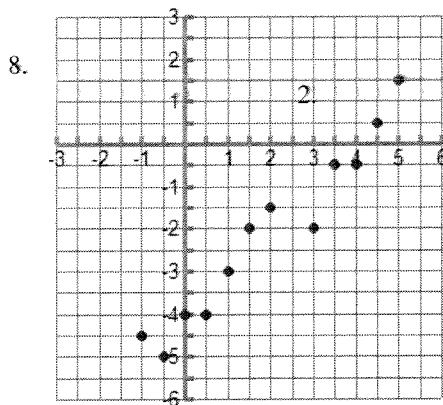
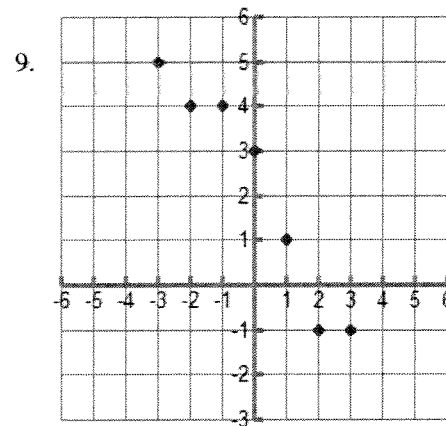
x	y
1	4
2	6
3	6
4	7
5	7
6	9

7. The table shows the number of U.S. high schools with computer networks from 1994 to 1997.

<i>Years Since 1994</i>	0	1	2	3
<i># of schools</i>	6576	8159	9166	9565

- Find the regression equation.
- Estimate the number of high schools with computer networks in 2002.

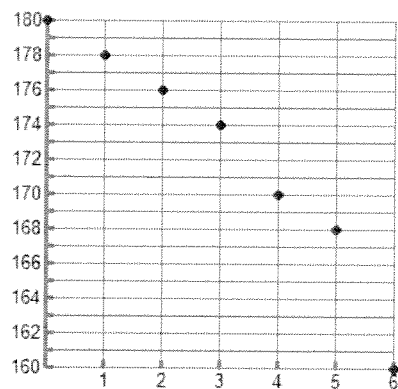
Find the line of regression.

[illegible][illegible]

10. The scatter plot shows the weight loss per week of a dieter. In the graph, y represents the person's weight in pounds and x represents the weeks of diet.

a. Find the equation that best fits this data.

x	y



b. Use the equation to find the dieter's approximate weight after 10 weeks.

Write an equation in slope-intercept form.

11. $(4, -3), m = 6$ 12. $(2, 5), m = \frac{3}{2}$ 13. $(-4, 4), (2, 5)$

Write an equation in standard form.

14. $y = -\frac{1}{3}x + \frac{2}{3}$ 15. $(-3, 2), m = -1$ 16. $(1, 8), (-2, -1)$

17. $(9, -5), m = 0$ 18. $(-2, 4), m = \text{undefined}$

Use the given information to write an equation that relates x and y .

19. $x = -14, y = -7, x$ and y vary directly 20. $x = -14, y = -7$